

---

## AGENDA

### Rogue Valley Metropolitan Planning Organization Technical Advisory Committee



---

*Date:* Wednesday, January 14, 2015  
*Time:* 1:30 p.m.  
*Location:* Jefferson Conference Room, RVCOG 155 N. 1<sup>st</sup> Street, Central Point  
*Transit:* served by RVTD Route #40  
*Phone:* Sue Casavan, RVCOG, 541-423-1360  
*RVMPO website :* [www.rvmpo.org](http://www.rvmpo.org)

---

1. **Call to Order/Introductions/Review Agenda** ..... **Mike Kuntz, Chair**
2. **Review/Approve Summary Minutes (Attachment #1)** ..... **Chair**
3. **Public Comment (Items not on the Agenda)** ..... **Chair**

***Report Item:***

4. **Alternative Measures Analysis Report** ..... **Dan Moore**  
*Background:* Staff completed the Alternative Measures 2010 benchmark analysis. Staff will present the findings and conclusions from the report.  
*Attachment:* #2 – Draft Alternatives Measures Report
5. **MPO Planning Update** ..... **Dan Moore**
6. **Public Comment** ..... **Chair**
7. **Other Business / Local Business** ..... **Chair**  
Opportunity for RVMPO member jurisdictions to talk about transportation planning projects.
8. **Adjournment** ..... **Chair**

- The next regularly scheduled RVMPO TAC Committee meeting: Wednesday, February 11, at 1:30 p.m. in the Jefferson Conference Room, RVCOG, Central Point.
- The next RVMPO Policy Committee meeting is scheduled for January 27, at 2:00 p.m. in the Jefferson Conference Room, RVCOG, Central Point.
- The next RVMPO PAC meeting is scheduled for Tuesday, January 20, at 5:30 p.m. in the Jefferson Conference Room, RVCOG, Central Point.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT SUE CASAVAN, 541-423-1360. REASONABLE ADVANCE NOTICE OF THE NEED FOR ACCOMMODATION PRIOR TO THE MEETING (48 HOURS ADVANCE NOTICE IS PREFERABLE) WILL ENABLE US TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY TO THIS MEETING.



**SUMMARY MINUTES**  
*Rogue Valley Metropolitan Planning Organization*  
*Technical Advisory Committee*

**November 12, 2014**

*The following people were in attendance:*

**RVMPO Technical Advisory Committee**

*Voting Members in Attendance:*

Alex Georgevitch	City of Medford
Ian Foster	City of Jacksonville
Jon Sullivan	RVTD
Josh Le Bombard	DLCD
Kelli Sparkman	ODOT
Kelly Madding	Jackson County
Kevin Caldwell	City of Phoenix
Matt Brinkley	City of Phoenix
Matt Samitore	City of Central Point
Mike Kuntz	Jackson County
Mike Upston	Eagle Point
Paige Townsend	RVTD
Tom Humphrey	City of Central Point

*Others Present:*

Mike Montero, Jenna Stanke, Ian Horlacher, Julie Brown, Tanner Berklund (Crater HS intern)

**RVCOG Staff**

Jonathan David, Dan Moore, Andrea Napoli, Bunny Lincoln, Sue Casavan

**1. Call to Order / Introductions -**

Chairman Mike Kuntz called the meeting to order at 1:35 p.m. Those present introduced themselves.

**2. Review / Approve Minutes -**

Chairman Kuntz asked committee members if there were any additions or corrections to the October meeting minutes.

**On a motion by Alex Georgevitch, seconded by Tom Humphrey, the minutes were approved by unanimous voice vote, as presented. Ian Horlacher abstained.**

**3. Public Comment**

No public comment was forthcoming.

**4. Alternative Measure #7 – Supplemental Transit Funding**

Paige Townsend presented information on Alternative Measure #7 related to transit finding in a

Power Point format:

- **RTP compliance with TPR – Slide #1.** Seven measures of reduced automobile usage are proposed as an alternative to the TPR's per capita VMT reduction measure
- **RVTD STP Funding Priorities – Slide #2.** Central Point will increase Rt. 40 service to 30-minute headways and provide service to the TOD when feasible. Medford will serve the SE Plan Area (TOD) when feasible. Phoenix will improve transit stops and explore improvements to the Hwy 99 (Main Street) pedestrian crossing to a northbound transit stop. Jackson County will increase transit service to White City.
- **STP Funds offset General Funds – Slide #3.** Funds are used for ongoing preventative maintenance and capitalization of maintenance projects.
- **FTA Basic Requirement –Slide #4.** RVTD is in compliance by providing regular vehicle as suggested by the manufacturer. maintenance
- **Facility Photos –** A verbal overview of RVTD facilities was presented with the Power Point photos.
- **Bus Stops –** A selection of bus stop photos was shown to the Committee.
- **Project History & STP Fund Expenditures, 2002 – present – Slide #5.** A list of fifteen (15) funding expenditures between 2002 and 2012 was shown.
- **Future Projects & Preventative Maintenance – Slide #6.** Future Projects (to 2019) include preventative maintenance, vehicle replacement and fare box replacement.
- **Securing Alternate Funding by 2020 (2014 Levy Failure) – Slide #7.**
- **Funding Graph (RVTD Estimated Annual Resources @ \$7.64M) – Slide #7.**  
(Urban renewal reduces \$\$\$)
- **What is \$850,000 (STP funding) to RVTD? – Slide #8.** Benefits of this amount would offset preventative fleet maintenance otherwise coming from general funds or operating grant, allows vehicle replacement on a regular schedule, permits completion of special projects (Example: CNG station), and represents 145,930 service miles/year (18% Of total system miles).

Members held a brief discussion on the ballot tax levy failure, encouraging RVTD staff not to give up trying for the levy in the future. Revenues from advertising on busses was also mentioned. Mike Upston said that recent property tax increases may also have influenced the Eagle Point negative vote.

The origin of the requirement for creating Alternative Measures was also briefly discussed by the Committee.

The Measure #7 presentation will also be made to the Policy Committee at some point after the SA analysis.

Based upon group discussion, it was agreed that VMT reductions need to be reviewed at a future meeting.

Julie Brown addressed the Committee regarding RVTD funding to 2020, the importance of continued transit service, and an open, ongoing dialog on the regional significance of RV (including an accurate TPAU model). Ms. Brown further said it was imperative that RVTD know whether future STP transit funding cuts might be considered by the TAC at some point. Ian Horlacher assured Ms. Brown that no one, including ODOT, was advocating transit reductions, but that funding is tight on all fronts. Mike Montero reiterated that these issues are also present in all walks of life,

and that there must be an understanding by both the public and private sectors on this matter.

**5. MPO Planning Update –**

Jonathan David stated that Staff is moving forward with creation of the RTP for the MRMPO. The Strategic Assessment is on the back burner right now.

**6. Public Comments – None.**

**7. Other Business / Local Business**

**8. Adjournment**

The meeting was adjourned at 2:35 p.m.



*Rogue Valley  
Metropolitan Planning Organization*

**Regional Transportation Planning**

Ashland • Central Point • Eagle Point • Jacksonville • Medford • Phoenix • Talent • White City  
Jackson County • Rogue Valley Transportation District • Oregon Department of Transportation

**DATE:** January 9, 2015  
**TO:** RVMPO Technical Advisory Committee  
**FROM:** Dan Moore, Planning Coordinator  
**SUBJECT:** Draft Alternative Measures Analysis Memorandum

The purpose of this memo is to report the results of the Alternative Measures 2010 benchmark analysis. The memo includes a description of each of the seven measures, the data used, how the analysis was performed (methodologies), and findings and conclusions for each of the seven measures. The RVMPO Technical Advisory Committee (TAC) is being asked to review and comment on the draft Alternative Measures Analysis Memo.

## Measure 1 – Transit and Pedestrian/Bicycle Mode Share

### 1.1 - Measure Description

This measure is intended to demonstrate a shift in travel behavior away from the automobile. This shift is anticipated to result from the region's planned improvements in the transit, bicycle and pedestrian infrastructure, as well as from the implementation of planned Transit-Oriented Developments (TODs). The benchmarks and target for this measure are shown in Table 1.1 below. A three-fold increase in transit mode share (from 1% to 3%) and a 35% increase in bicycle and walking (non-motorized) mode share (from 8.2% to 11%) have been set as 20-year targets for this measure.

**Table 1.1 - 20-Year Target for Mode Share**

<i>Measure</i>	<i>How Measured</i>	<i>2000</i>	<i>Benchmark 2005</i>	<i>Benchmark 2010</i>	<i>Benchmark 2015</i>	<i>Target 2020</i>
<i>Measure 1: Transit and bicycle/pedestrian mode share</i>	The percent of total daily trips taken by transit and the combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% <i>daily trips</i> transit: 1.0 bike/ped: 8.2	% <i>daily trips</i> transit: 1.2 bike/ped: 8.4	% <i>daily trips</i> transit: 1.6 bike/ped: 8.4	% <i>daily trips</i> transit: 2.2 bike/ped: 9.8	% <i>daily trips</i> transit: 3.0 bike/ped: 11

### 1.2 - Mode Share Data Used for the 2010 Benchmark Analysis

The mode share data used for 2010 benchmark analysis were derived from the RVMPOv3.1 travel demand model provided by the Oregon Department of Transportation (ODOT) Transportation Planning Analysis Unit (TPAU).

### 1.3 - Mode Share Benchmark Analysis Methodology

The mode share for 2010 was determined by utilizing home-based and non-home-based activity data output from the RVMPOv3.1 travel demand model as shown in Table 1.2 below.

Table 1.2 below depicts the 2006, 2010 & 2015 home-based and non-home-based trip purpose mode share percentages derived from the RVMPO v3.1 travel demand model. The model is calibrated to the 1995/1996 Oregon Household Travel Survey, and 2010 is interpolated between 2006 and 2015.

**Table 1.2 – 2006, 2010 & 2015 Home-Based & Non-Home-Based Trips  
Mode Share Percentages – RVMPO v3.1**

2006, 2010 & 2015 Home-Based & Non-Home-Based Trip Purpose Mode Share - RVMPO v3.1 Model								
2006 RVMPO-v3.1	Drive-Alone	Drive-w-Passenger	Passenger	Bus-Walk	Bus/Park & Ride	Bike	Walk	Sub-Total
Daily Period Total	266,971	194,535	253,963	11,690	359	7,530	59,606	794,654
Daily Period Mode %	33.60%	24.48%	31.96%	1.47%	0.05%	0.95%	7.50%	100%
<b>2006</b>	<b>Auto</b>			<b>Transit</b>		<b>Bike/Walk</b>		
	<b>90.04%</b>			<b>1.52%</b>		<b>8.45%</b>		
2010 RVMPO-v3.1 Interpolated	Drive-Alone	Drive-w-Passenger	Passenger	Bus-Walk	Bus/Park & Ride	Bike	Walk	Sub-Total
Daily Period Total	287,125	209,517	271,756	12,012	328	7,834	61,935	850,507
Daily Period Mode %	33.76%	24.63%	31.95%	1.41%	0.04%	0.92%	7.28%	100%
<b>2010</b>	<b>Auto</b>			<b>Transit</b>		<b>Bike/Walk</b>		
	<b>90.35%</b>			<b>1.45%</b>		<b>8.20%</b>		
2015 RVMPO-v3.1	Drive-Alone	Drive-w-Passenger	Passenger	Bus-Walk	Bus/Park & Ride	Bike	Walk	Sub-Total
Daily Period Total	312,318	228,243	293,999	12,414	289	8,214	64,847	920,324
Daily Period Mode %	33.94%	24.80%	31.95%	1.35%	0.03%	0.89%	7.05%	100%
<b>2015</b>	<b>Auto</b>			<b>Transit</b>		<b>Bike/Walk</b>		
	<b>90.68%</b>			<b>1.38%</b>		<b>7.94%</b>		

**1.4 - Measure 1 – Mode Share Analysis Findings**

Using the RVMPO v3.1 interpolated 2010 home-based and non-home-based trip purpose data shows that transit makes up 1.45% of the mode share, which is 0.15% below the 2010 benchmark of 1.6%. The 2010 Bike/Walk data from the model shows 8.20% mode share which is 0.20% below the 8.4% benchmark.

**Table 1.3 – Measure 1: Transit & Bike/Ped Mode Share 2010 Benchmark Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 1: Transit and Bicycle/Pedestrian Mode Share	The percent of total daily trips taken by transit and combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips
		Transit: 1.0 Bike/Ped: 8.2	Transit: 1.0 Bike/Ped: 8.2	<b>Transit: 0.9 Bike/Ped: 7.3</b>	Transit: 1.6 Bike/Ped: 8.4	<b>Transit: 1.45 Bike/Ped: 8.20</b>	Transit: 2.2 Bike/Ped: 9.8	Transit: 3.0 Bike/Ped: 11

**1.5 - Measure 1 – Mode Share Analysis Conclusions**

This analysis included review of several different sources of information including; RVMPOv3.1 travel demand model data, 2010 Oregon Household Activity Survey (OHAS), 2013 Rogue Valley Transportation District (RVTD) On-Board Transit Survey, 2010 Transit Boardings

Estimation and Simulation (TBest) model, Census and American Community Survey (ACS) data. Below is a description of the different data sets reviewed and the final conclusion on which mode share data to use for the analysis.

In September 2014, ODOT's Transportation Planning Analysis Unit (TPAU) provided mode share data from the RVMPO v3.1 regional travel demand model for the Alternative Measures 2010 benchmark analysis. The model estimated 0.51%, 0.46% and 0.41% transit mode share (not including school student bus trips) percentages for 2006, 2010, and 2015 respectively. The 2010 transit mode benchmark is 1.6%. The model also estimated bicycle and walking (bike/ped) mode share percentages of 8.38%, 7.49% and 6.56% for 2006, 2010 and 2015 respectively. The bike/ped mode share benchmark for 2010 is 8.4%. The results showed that 2010 benchmarks for transit and bike/ped were not achieved. TPAU recommended using the 2010 Oregon Household Activity Survey (OHAS) data.

In October, TPAU provided new mode share data based on 2010 OHAS survey, 2013 RVTD On-Board Transit Survey, 2010 TBest Transit model, and 2010 RVMPO v4.1(work in progress) model with transit enhancements. The 2010 data showed an 8.95% bike/ped mode share which exceeds the 2010 benchmark of 8.45%. The transit mode share was at 0.51% (less than 1%) and more than 1% lower than the benchmark of 1.6% for 2010. In addition, Census and American Community Survey (ACS) journey-to-work data was analyzed. It was determined that this data only captured work trips and was not an accurate representation of RVMPO daily mode share. It was concluded that the 2010 survey/v4.1 data provided by TPAU (8.95% bike/ped and 0.51% transit) would be used for the 2010 mode share benchmark.

In December 2014, TPAU and RVMCOG staff had further discussions about the mode share data, and decided to run the RVMPO v3.1 model again using home-based trip and non-home-based activity parameters. TPAU and RVMCOG staff agreed that these categorical trips would more accurately reflect the daily RVMPO mode choices. The model run included daily person trip forecasts by seven (7) travel modes and eight (8) purposes. For the previous model runs, TPAU only reported the total daily mode share not by different purposes, and neither included school student trips in the daily mode share calculation. The results of this model runs show that:

- In 2006, transit makes up 1.52% of the mode share, which is 0.08% below the 2010 benchmark of 1.6%. The 2006 bike/walk data from the model shows 8.45% mode share which is 0.05% above the 8.4% 2010 benchmark.
- In 2010, transit makes up 1.45% of the mode share, which is 0.15% below the 2010 benchmark of 1.6%. The 2010 bike/walk data from the model shows 8.20% mode share which is 0.20% below the 8.4% 2010 benchmark.
- In 2015, transit makes up 1.38% of the mode share, which is 0.22% below the 2010 benchmark of 1.6%. The 2015 bike/walk data from the model shows 7.94% mode share which is 0.46% below the 8.4% 2010 benchmark.

The RVMPO v3.1 home-based and non-home-based trip activity data – being the best available data – was used for the benchmark analysis. It was determined that this data more accurately reflects the daily RVMPO travel mode choices. However, the results of the analysis show that the 2010 benchmarks for transit and bike/walk mode shares using the RVMPO v3.1 travel demand model have not been achieved (albeit by fractions of percentages). The preference was to use the updated RVMPO v4.1 model which was not available for this analysis. It is



recommended that when the RVMPO v4.1 model is ready (early 2015) for use, that the mode share analysis be redone with that model. It is anticipated that future analyses will continue to show a decline in mode share, unless the region adds more transit service.

## Measure 2 – Percent Dwelling Units within ¼ Mile Walk to 30 Minute Transit Service

### 2.1 - Measure Description

This measure is intended to demonstrate improvements in transit accessibility. Unlike Measure 1 which considers mode share and tracks overall transit system usage regardless of service levels; this measure considers distance to a transit route, the routes service levels, and improving density around transit routes. For this measure to be successful, it requires development of dwellings within ¼ mile of transit routes and RVTD improving service levels system wide. A walking distance of ¼ mile from a dwelling is assumed to provide reasonable pedestrian access to a transit line. Only those transit lines that provide at least 30-minute or better headway will be counted towards meeting the benchmarks and target shown in Table 2.1. Progress on this measure is tracked through GIS.

**Table 2.1 - 20-Year Target for Transit Accessibility**

<i>Measure</i>	<i>How Measured</i>	<i>2000</i>	<i>Benchmark 2005</i>	<i>Benchmark 2010</i>	<i>Benchmark 2015</i>	<i>Target 2020</i>
<i>Measure 2: % Dwelling Units (DU's) w/in ¼ mile walk of 30-minute transit service</i>	Determined through GIS mapping.	12%	20%	30%	40%	50%

### 2.2 - Transit Accessibility Data Used for the 2010 Benchmark Analysis

Staff collected tax lot data from the Jackson County's Assessor's Office that was used to identify dwelling-units within a ¼ mile along 30-minute transit lines. GIS transit route data was provided by RVTD. Other data files included the RVMPO Boundary GIS shape file.

### 2.3 - Benchmark Analysis Methodology

Geographic Information System (GIS) mapping software was used for the Measure 2 analysis. The data was compiled by utilizing GIS and Jackson County Assessor tax codes for (existing) 2014 taxlots to determine the total of non-vacant housing in the RVMPO in 2014. Using GIS, the analysis looked at total dwelling units in the RVMPO area compared to those dwelling units that are within ¼ mile of the 30-minute transit service.

Below is the step-by-step process for analyzing the transit accessibility Alternative Measure.

1. Requested and/or uploaded new data for 30 minute bus routes (RVTD provided) and taxlots (Jackson County Smartmap/RVCOG internal GIS server). Revised existing coverage to select the 30 minute bus routes only.
2. Created a map (GIS Project) with the taxlots, RVMPO Boundary, bus routes, and taxlots. Map was sent to Dan in December.
3. Intersected taxlots and the RVMPO boundary using ArcGIS Intersect. 70,096 records.

4. Buffered 30 minute bus routes with a 0.25 mile buffer. Used buffer feature on ArcGIS.
5. Intersected taxlots and 30 minute buffer to create taxlots layer within 0.25 miles of bus routes. Used intersect feature on ArcGIS. 25,062 records.
6. Exported intersect data to access (default export of data is dbf).
7. Filtered improvements to select all improved values above \$19,999.00. 19,850 records
8. Filtered property class data to select all features related to dwellings. 16,403 records.
9. Repeated filter of \$19,999.00 for all taxlots in RVMPO. 70,096 records.
10. Filtered property class data to select all features related to dwellings. 45,638 records.
11. 16,403/45,638 = 35.9 % of selected taxlots are within 0.25 miles of the bus route.

#### 2.4 - Measure 2 – Transit Accessibility Analysis Findings

Based on the GIS analysis described above, thirty-six percent (36%) of dwelling units in the RVMPO are located within ¼ mile walking distance of 30-minute RVTD bus routes, which is 6% above the 2010 benchmark of 30%. Table 2.2 below shows the results of the 2005 & 2010 benchmark analyses, completed in 2007 and 2014.

**Table 2.2 – Measure 2: Transit Accessibility 2010 Benchmark Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 2: % Dwelling Units (DU's) w/in 1/4 Mile Walk to 30-Min. Transit Service	Determined through GIS mapping.	12%	20%	34%	30%	36%	40%	50%

#### 2.5 - Measure 2 – Transit Accessibility Analysis Conclusions

The analysis completed in 2014, shows that the MPO exceeded the Measure 2 – Transit Accessibility 2010 benchmark of 30% by 6%. In 2007, the analysis showed that 34% of dwelling units were within ¼ mile of 30-minute transit, which surpassed the 2005 benchmark by 14%. Dwelling units within ¼ mile of 30-minute transit have increased by 2% since 2007. In order to meet the 2015 benchmark of 40% there will have to be a 4% increase in dwelling units, and/or RVTD adding more 30-minute transit routes in the MPO area.

### Measure 3 - Percentage of Collectors/Arterials with Bicycle Facilities

#### 3.1 - Measure Description

The RVMPO programs projects along collector and arterial streets within the MPO boundaries. Consistent with the TPR, the RVMPO’s policy is for these facilities to include bicycle lanes or, in rural areas, shoulders with a width greater than four feet. This measure is intended to track the progress of including these facilities on the MPO’s street network and as a way to demonstrate improved accessibility for bicyclists.

5-year benchmarks and 20-year target are shown below in Table 3.1.

**Table 3.1 - 20-Year Target for Bicycle Facilities**

<i>Measure</i>	<i>How Measured</i>	<i>2000</i>	<i>Benchmark 2005</i>	<i>Benchmark 2010</i>	<i>Benchmark 2015</i>	<i>Target 2020</i>
<i>Measure 3: % Collectors and arterials w/ bicycle facilities</i>	Determined through GIS mapping.	21%	28%	37%	48%	60%

### 3.2 - Bicycle Facilities Data Used for the 2010 Benchmark Analysis

Base maps were distributed to Eagle Point, White City, Jackson County, Jacksonville, Central Point, Medford, Phoenix, Talent and Ashland. The jurisdictions identified bicycle facilities on the base maps within their UGBs (UCB for White City) using the following criteria:

- Shoulders 4-ft in width, or greater
- Striped bike lanes 4-ft in width, or greater
- Separated bike paths 4-ft in width, or greater

A GIS shapefile was created with the base map data returned from the jurisdictions, data from consultants working on local TSP updates, data from various city GIS staff, and the most current Jackson County bike lane GIS file.

### 3.3 - Benchmark Analysis Methodology

1. Measured total linear feet of arterials and collectors within the RVMPO boundary (both directions)
2. Measured total linear feet of bicycle facilities identified by the jurisdictions
3. Calculated percentage of bicycle facilities on arterials and collectors within the MPO boundary
4. Multi-use paths were measured (added to linear feet calculation and also added separately)

### 3.4 – Measure 3 - Percentage of Arterials/Collectors with Bicycle Facilities Analysis Findings

There is a total of 4,640,107 linear feet of arterials and collectors within the RVMPO planning area (both directions). The jurisdictions in the RVMPO reported a total of 2,507,130 linear feet of bicycle facilities on arterials and collectors, not including multi-use paths. The percentage of bike facilities is 54% within the RVMPO (without multi-use paths). Adding 262,045 linear feet of the multi-use paths in both directions (Bear Creek Greenway, Ashland Multi-Use Path, and Larson Creek Multi-Use Path) brings the total percentage to 59% of bicycle facilities on arterials and collectors within the RVMPO, which is 22% greater than the 2010 benchmark of 37%.

Table 3.2 below depicts the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

**Table 3.2 – Measure 3: Percentage of Arterials/Collectors with Bicycle Facilities  
2010 Benchmark Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 3: % Collectors and Arterials with Bicycle Facilities	Determined through GIS mapping.	21%	28%	37%	37%	59%	48%	60%

**3.5 – Measure 3 - Percentage of Arterials/Collectors with Bicycle Facilities Analysis**

**Conclusions**

The results of the 2010 bike facility analysis shows that almost 60% of the region’s arterial and collector roadways have provisions for bicyclists. This not only exceeds the 2010 benchmark of 37%, but also the 48% 2015 benchmark. At this time, the RVMPO is within 1% of the 2020 target of 60%.

**Measure 4 - Percentage of Collectors and Arterials in TOD Areas with Sidewalks**

**4.1 - Measure Description**

The RVMPO has areas that are currently planned for mixed-use, pedestrian friendly development or are in downtown areas. This measure is intended to demonstrate improvements in pedestrian accessibility in these portions of the MPO area - where pedestrian access is most critical.

Proposed 5-year benchmarks and 20-year targets are shown below in Table 4.1.

**Table 4.1 – 20-Year Target for Pedestrian Facilities**

Measure	How Measured	2000	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 4: % Collectors and arterials in TOD areas w/ sidewalks	Determined through GIS mapping.	47%	50%	56%	64%	75%

**4.2 - Sidewalk Data Collected for 2010 Benchmark Analysis**

Data was derived from an existing RVMCOG GIS sidewalk shapefile created in 2007 using GPS equipment, data from local TSPs, and GIS data from Ashland. Staff used Google Map for additional sidewalk identification.

**4.3 - Benchmark Analysis Methodology**

1. Identified arterials and collectors in Activity Centers (TOD areas)
2. Edited/updated RVMCOG GPS 2007 shapefile to include additional sidewalks (subtracted Ashland out of GPS file and added in GIS file provided by city)
3. Calculated total linear feet of sidewalks
4. Calculated total linear feet of arterials and collectors in activity centers (both directions)

5. Percent of sidewalks calculated using linear feet totals of sidewalks and arterials/collectors (both directions)

#### 4.4 – Measure 4 - Percentage of Arterials/Collectors with Sidewalks Analysis Findings

There is a total of 1,512,648 lane feet of arterials and collectors (both directions) and 461,445 linear feet of sidewalks in Activity Centers located in the RVMPO. The 2014 analysis shows that 30% of arterials and collectors within RVMPO Activity Centers have sidewalks, which falls below the 2010 benchmark of 56% by 26%. Table 4.2 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

**Table 4.2: Measure 4 - Percentage of Arterials/Collectors with Sidewalks 2010 Benchmark Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 4: % Collectors and Arterials in TOD Areas w/Sidewalks	Determined through GIS mapping.	47%	50%	55%	56%	30%	64%	75%

#### 4.5 – Measure 4 - Percentage of Arterials/Collectors with Sidewalks Analysis Conclusions

The Activity Center sidewalk inventory accounted for the presence of a sidewalk on one or both sides of an arterial or collector street within the defined RVMPO Activity Centers. The total sidewalk inventory was compared to the total linear feet of Activity Center arterial/collector roadways in both travel directions. The result is 30% of the total linear feet of arterials/collectors in Activity Centers have sidewalks. Had the analysis been done using linear feet in one direction, the result would be 61% of the arterials/collectors with sidewalks. This may explain the disparity between the sidewalk benchmark measured in 2007 which showed 55% sidewalk coverage, compared to the 2014 benchmark result of 30%. It appears that the original benchmarks and target (including the 2007 benchmark analysis) were done using linear feet of roadways in one direction.

### Measure 5 - Percentage of New Dwelling Units in Mixed-Use/Pedestrian-Friendly Areas

#### 5.1 - Measure Description

The objective of Measure 5 is to demonstrate progress towards creating mixed use, pedestrian-friendly developments in the MPO. Progress towards meeting the benchmarks and target for this measure is determined by monitoring development after the appropriate land use and development regulations have been adopted. Mixed use, pedestrian-friendly development occurring within downtown areas in Ashland, Talent, Phoenix, Jacksonville, Medford, Central Point, White City and Eagle Point, as well as within Activity Centers (TOD sites), will count towards meeting the benchmark and target figures shown below in Table 5.1. The benchmarks and target shown in the table represent the projected mixed-use development for 2000 to 2020.

**Table 5.1 – 20-Year Target for New Dwelling-Units in Mixed-Use Pedestrian Friendly Areas**

<b>Measure</b>	<b>How Measured</b>	<b>2000</b>	<b>Benchmark 2005</b>	<b>Benchmark 2010</b>	<b>Benchmark 2015</b>	<b>Target 2020</b>
Measure 5: % Mixed-use DUs in new development	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	26%	41%	49%

**5.2 - Dwelling Unit Data Collected for 2010 Benchmark Analysis**

Staff collected tax lot data from the Jackson County’s Assessor’s Office to identify new dwelling-units (that fit the criteria) within the Activity Centers that were developed by each jurisdiction.

**5.3 – Benchmark Analysis Methodology**

For the 2010 analysis, staff followed the methodology outlined in a TAC memo written in August 2008, using activity center maps provided by participating jurisdictions. Qualifying structures in the activity centers include apartments, single-family dwellings on parcels no larger than .10 acre, duplexes on parcels no larger than .20 acre, triplexes on parcels no larger than .30 acre, and four-plexes on parcels no larger than .40 acre.

**5.4 - Measure 5 – New Dwelling Units in Mix-Used Pedestrian-Friendly Areas Findings**

Staff found a total of 12,530 units constructed since 2000 throughout the MPO, of which 2,785 units met the benchmark requirements. This represents 22.2 percent of the total. The number of units built in activity centers since 2000 is significantly higher, but the methodology requires that only those developments meeting the target density of ten units per acre may be counted. Table 5.2 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

**Table 5.2: Measure 5 - New Dwelling Units in Mix-Used Pedestrian-Friendly Areas 2010 Benchmark Analysis**

<b>Measure</b>	<b>How Measured</b>	<b>2000</b>	<b>Benchmark 2005</b>	<b>Measured 2007</b>	<b>Benchmark 2010</b>	<b>Measured 2014</b>	<b>Benchmark 2015</b>	<b>Target 2020</b>
Measure 5: % Mixed-Use DUs in new development	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	10%	26%	22%	41%	49%

**5.5 - Measure 5 – New Dwelling Units in Mix-Used Pedestrian-Friendly Areas Conclusions**

The 2010 benchmark for new dwelling units in mixed-use, pedestrian-friendly areas is 26%. The 2014 analysis shows that 22% of the dwelling units – meeting the density requirements - constructed since 2000 are located within mixed-use, pedestrian-friendly areas (RVMPO Activity Centers), which is 4% lower than the benchmark.

## Measure 6 - Percentage of New Employment in Mixed-Use/Pedestrian-Friendly Areas

### 6.1 - Measure Description

The objective of Measure 6 is to demonstrate progress towards creating mixed use, pedestrian-friendly developments in the MPO. Progress towards meeting the benchmarks and target for this measure is determined by monitoring development after the appropriate land use and development regulations have been adopted. Mixed use, pedestrian-friendly development occurring within downtown areas in Ashland, Talent, Phoenix, Jacksonville, Medford, Central Point and Eagle Point, as well as within Activity Centers (TOD sites), will count towards meeting the benchmark and target figures shown below in Table 6.1. The benchmarks and target shown in the table represent the projected mixed-use employment for 2000 to 2020.

**Table 6.1 – 20-Year Target New Employment for Mixed-Use Pedestrian Friendly Areas**

<i>Measure</i>	<i>How Measured</i>	<i>2000</i>	<i>Benchmark 2005</i>	<i>Benchmark 2010</i>	<i>Benchmark 2015</i>	<i>Target 2020</i>
<i>Measure 6:</i> % Mixed-use employment in new development	Estimated from annual employment files from State - represents the ratio of new employment in TODs over total regional employment.	0%	9%	23%	36%	44%

### 6.2 – Mixed-Use Employment Data Collected for 2010 Benchmark Analysis

Staff collected tax lot data from the Jackson County’s Assessor’s Office that will be used to identify new mixed-use employment (that fit the criteria) within the Activity Centers that were developed by each jurisdiction.

### 6.3 – Benchmark Analysis Methodology

The measurement methodology was refined in August 2008, resulting in much lower levels of qualifying employment. In order to satisfy the benchmark, businesses must meet the following standards:

- Provide no parking between the building and street
- Provide a main entrance from the street
- Include a vertical mix of housing
- Be within ¼ mile of higher density residential development
- Contain a complete pedestrian connection between the project and the higher density residential development.

### 6.4 - Measure 6 – Percent Mixed-Use Employment in New Development Findings

Using formulas that calculate the number of employees based on the size of the structure, staff estimated that 209 employees work in the qualifying businesses, which is only 12 percent of the estimated total of 1,740 employed in businesses constructed since 2000. Table 6.2 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

**Table 6.2: Measure 6 - New Employment in Mix-Used Pedestrian-Friendly Areas 2010 Benchmark Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 6: % Mixed-use employment in new development	Estimated from annual employment files from State - represents the ratio of new development in TODs over total regional employment	0%	9%	17%	23%	12%	36%	44%

**6.6 - Measure 6 – Percent Mixed-Use Employment in New Development Conclusions**

The 2010 benchmark for new employment in Activity Centers is 23%. The analysis shows that only 12% of new employment is within Activity Centers, which is 11% lower than the benchmark and 5% below the 2007 results of 17%.

**Measure 7 - Alternative Transportation Funding****7.1 – Measure Description**

This measure has been developed to demonstrate the RVMPO's commitment to implementing the alternative transportation projects upon which many of the proposed measures rely. Funds made available to the RVMPO through the Surface Transportation Program (STP) are the only funds over which the RVMPO has complete discretion. RVMPO jurisdictions have agreed to direct 50% of this revenue stream, historically used for vehicular capacity expansion projects, towards alternative transportation projects. STP funds would be used to expand transit service, or, if RVTD is successful with a local funding package, to fund bicycle/pedestrian and TOD-development supportive projects. Table 7.1 shows 5-year benchmarks and the 20-year target for this measure.

**Table 7.1.1 – 20-Year Target for Alternative Transportation Funding**

Measure	How Measured	2000	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 7: Alternative Transportation Funding	Funding committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent ½ of the MPO's estimated accumulation of discretionary funding (STP*).	N/A	\$950,000	\$2.5 Million	\$4.3 Million	\$6.4 Million

\*STP revenue estimates developed by Oregon Department of Transportation.

As part of Measure 7, priorities for STP-funded transit projects were developed in consultation with MPO jurisdictions. The list was intended as a starting point for determining how STP funds will be spent by RVTD. Table 7.1.2 below lists the transit projects by jurisdiction. Projects are not listed in any particular order.



**Table 7.1.2 - STP Funding Priorities for Rogue Valley Transportation District (RVTD)**

<b>Measure 7 - STP-Funded Transit Projects</b>	
<i>Central Point</i>	RVTD will increase service on Route 40 (Central Point) to 30 minute headways and provide service to the TOD site when feasible.
<i>Medford</i>	RVTD will serve the Southeast Plan Area (Medford TOD) when feasible.
<i>Phoenix</i>	RVTD will improve transit stops within Phoenix.
	RVTD will explore ways to improve Hwy 99 (Main Street) pedestrian crossing to a northbound transit stop, and in the interim, will provide shuttle service for this purpose.
<i>Jackson County</i>	RVTD will increase transit service to White City (unincorporated Jackson County).

**7.2 – Alternative Transportation Funding Data Collected for 2010 Benchmark Analysis**

Alternative transportation funding data is derived from RVMPO TIPs, and STP Status Excel spreadsheets (maintained by RVCOG). The current status of the STP-Funded transit projects was provided by RVTD.

**7.3 - Benchmark Analysis Methodology**

Two Excel spreadsheets were developed that lists the amounts of STP funds provided to RVTD for Federal Fiscal Years 2002 – 2010 for the 2010 benchmark analysis, and another spreadsheet that totals the amount of STP funds to RVTD for 2002 to 2015.

**7.4 – Measure 7 – Alternative Transportation Funding Analysis Findings**

Table 7.2.1 below shows a total of \$4,972,275 in RVMPO STP funds committed to transit from 2002 to 2010.

**Table 7.2.1 – 50% RVMPO STP Funds to RVTD 2002 - 2010**

<b>50% RVMPO STP Funds to RVTD 2002 - 2010</b>					
<b>Federal Fiscal Year</b>	<b>Federal</b>		<b>Federal Required Match</b>		<b>Total Fed+Req Match</b>
	<b>\$</b>	<b>Source</b>	<b>\$</b>	<b>Source</b>	
2002	\$252,622	MPO STP	\$ 28,914	RVTD	\$ 281,536
2003	\$368,077	MPO STP	\$ 42,128	RVTD	\$ 410,205
2004	\$563,380	MPO STP	\$ 64,481	RVTD	\$ 627,861
2005	\$607,439	MPO STP	\$ 69,524	RVTD	\$ 676,963
2006	\$644,533	MPO STP	\$ 73,770	RVTD	\$ 718,303
2007	\$605,354	MPO STP	\$ 69,285	RVTD	\$ 674,639
2008	\$625,354	MPO STP	\$ 71,575	RVTD	\$ 696,929
2009	\$645,467	MPO STP	\$ 73,877	RVTD	\$ 719,344
2010	\$660,049	MPO STP	\$ 75,546	RVTD	\$ 735,595
<b>Total</b>	<b>\$4,972,275</b>		<b>\$ 569,099</b>		<b>\$ 5,541,374</b>

Table 7.2.2 below, shows a total of \$9,141,501 of MPO STP directed to RVTD from 2002 to 2015.

**Table 7.2.2 – 50% RVMPO STP Funds to RVTD 2002 - 2015**

50% RVMPO STP Funds to RVTD 2002 - 2015					
Federal Fiscal Year	Federal		Federal Required Match		Total Fed+Req Match
	\$	Source	\$	Source	
2002	\$252,622	MPO STP	\$ 28,914	RVTD	\$ 281,536
2003	\$368,077	MPO STP	\$ 42,128	RVTD	\$ 410,205
2004	\$563,380	MPO STP	\$ 64,481	RVTD	\$ 627,861
2005	\$607,439	MPO STP	\$ 69,524	RVTD	\$ 676,963
2006	\$644,533	MPO STP	\$ 73,770	RVTD	\$ 718,303
2007	\$605,354	MPO STP	\$ 69,285	RVTD	\$ 674,639
2008	\$625,354	MPO STP	\$ 71,575	RVTD	\$ 696,929
2009	\$645,467	MPO STP	\$ 73,877	RVTD	\$ 719,344
2010	\$660,049	MPO STP	\$ 75,546	RVTD	\$ 735,595
2011	\$688,237	MPO STP	\$ 78,772	RVTD	\$ 767,009
2012	\$814,368	MPO STP	\$ 93,208	RVTD	\$ 907,576
2013	\$838,505	MPO STP	\$ 95,971	RVTD	\$ 934,476
2014	\$887,953	MPO STP	\$ 101,630	RVTD	\$ 989,583
2015	\$940,163	MPO STP	\$ 107,606	RVTD	\$ 1,047,769
<b>Total</b>	<b>\$9,141,501</b>		<b>\$1,046,286</b>		<b>\$10,187,787</b>

**Table 7.2.3 – Measure 7: Alternative Transportation Funding Analysis**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 7: Alternative Transportation Funding	Funding Committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent 1/2 of the MPO's estimated accumulation of discretionary funding (STP).	NA	\$950,000	\$1.4 Million	\$2.5 Million	\$4.9 Million	\$4.3 Million	\$6.4 Million

Table 7.2.3 above shows the results of the benchmark analyses for 2005 & 2010 that were completed in 2007 and 2010. Almost \$5 million in STP funds has been committed to RVTD for transit projects from 2002 to 2010, which is \$2.5 million more than the 2010 benchmark.

Table 7.2.4 below outlines the status of the Alternative Measures STP-funded transit projects.

**Table 7.2.4 – Measure 7: Transit Project Status**

Measure 7 - STP-Funded Transit Projects		2010 Status
<i>Central Point</i>	RVTD will increase service on Route 40 (Central Point) to 30 minute headways and provide service to the TOD site when feasible.	<ul style="list-style-type: none"> <li>Route 40 has 30 minute headways (~\$315,000 investment annually)</li> <li>Service to the TOD site is not feasible at this time</li> </ul>
<i>Medford</i>	RVTD will serve the Southeast Plan Area (Medford TOD) when feasible.	<ul style="list-style-type: none"> <li>Service to the SE Plan Area is not feasible at this time</li> </ul>
<i>Phoenix</i>	RVTD will improve transit stops within Phoenix.	<ul style="list-style-type: none"> <li>RVTD is working with Phoenix Urban Renewal on transit improvements</li> </ul>
	RVTD will explore ways to improve Hwy 99 (Main Street) pedestrian crossing to a northbound transit stop, and in the interim, will provide shuttle service for this purpose.	
<i>Jackson County</i>	RVTD will increase transit service to White City (unincorporated Jackson County).	<ul style="list-style-type: none"> <li>Route 60 has 30 minute headways (~\$578,000 investment annually)</li> </ul>

Table 7.2.5 below shows the expenditures made by RVTD with STP funds from Federal Fiscal Year (FFY) 2002 to FFY 2012)

**Table 7.2.5 – Measure 7: Transit STP Expenditures**

Measure 7 – RVTD STP-Funded Transit Expenditures		
Federal Fiscal Year	Project/Activity	Total Expenditure
FFY 2002-2005	<ul style="list-style-type: none"> <li>Purchased seven (7) vehicles</li> </ul>	\$1,791,518
FFY 2006	<ul style="list-style-type: none"> <li>Preventive Maintenance</li> <li>Installed bus wash equipment</li> <li>Bus stop shelters and facilities</li> </ul>	\$1,251,972
FFY 2007	<ul style="list-style-type: none"> <li>Preventive maintenance</li> <li>CNG facility (built in 2011)</li> </ul>	\$605,354
FFY 2008-2009	<ul style="list-style-type: none"> <li>Preventive maintenance</li> <li>Purchase two (2) vehicles</li> </ul>	\$1,270,821
FFY 2010-2011	<ul style="list-style-type: none"> <li>Preventive maintenance</li> <li>Purchased surveillance equipment</li> <li>Bus route signage and shelter rehabilitation</li> </ul>	\$1,348,286
FFY 2012	<ul style="list-style-type: none"> <li>Preventive maintenance</li> <li>Front Street Station renovation</li> <li>Bus route shelters and rehabilitation</li> <li>Shop equipment</li> </ul>	\$814,748

### 7.5 – Measure 7 – Alternative Transportation Funding Analysis Conclusions

The MPO exceeded the 2010 benchmark for providing 50% of STP funds to RVTD, and the transit projects listed in Table 7.2.4 are moving forward. It is important to note that STP funds cannot be used for transit operations. Therefore, RVTD uses the funds to offset maintenance and capital costs, which frees up other RVTD funding sources for transit service.

**Table 8 – Alternative Measures 2007 & 2014 Benchmark Analysis Results**

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 1: Transit and Bicycle/Pedestrian Mode Share	The percent of total daily trips taken by transit and combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips
		Transit: 1.0 Bike/Ped: 8.2	Transit: 1.0 Bike/Ped: 8.2	<b>Transit: 0.9 Bike/Ped: 7.3</b>	Transit: 1.6 Bike/Ped: 8.4	<b>Transit: 1.52 Bike/Ped: 8.45</b>	Transit: 2.2 Bike/Ped: 9.8	Transit: 3.0 Bike/Ped: 11
Measure 2: % Dwelling Units (DUs) w/in 1/4 Mile Walk to 30-Min. Transit Service	Determined through GIS mapping.	12%	20%	<b>34%</b>	30%	<b>36%</b>	40%	50%
Measure 3: % Collectors and arterials w/bicycle facilities	Determined through GIS mapping.	21%	28%	<b>37%</b>	37%	<b>59%</b>	48%	60%
Measure 4: % Collectors and Arterials in TOD Areas w/Sidewalks	Determined through GIS mapping.	47%	50%	<b>55%</b>	56%	<b>30%</b>	64%	75%
Measure 5: % Mixed-Use DUs in new development	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	<b>10%</b>	26%	<b>22%</b>	41%	49%
Measure 6: % Mixed-use employment in new development	Estimated from annual employment files from State - represents the ratio of new development in TODs over total regional employment	0%	9%	<b>17%</b>	23%	<b>12%</b>	36%	44%
Measure 7: Alternative Transportation Funding	Funding Committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent 1/2 of the MPO's estimated accumulation of discretionary funding (STP).	NA	\$950,000	<b>\$1.4 Million</b>	\$2.5 Million	<b>\$4.9 Million</b>	\$4.3 Million	\$6.4 Million